

Application Serial No. 10/687,293  
Amendment dated January 5, 2006  
Reply to Office Action dated November 2, 2005

**Amendments to the Drawings:**

Applicants herewith submit eight (8) replacement sheets of formal drawings in **Appendix A**. These sheets, which include Figures 1-8, replace the original sheets including Figures 1-8.

The attached sheets of drawings also include changes to Figures 6 and 8. In Figures 6 and 8, Applicants have added reference numeral 140. In Figure 8, Applicants have added drive component (164) which extends through the endframe opening (114) (Figure 6), magnet opening (138) (Figure 6), and cover opening (160). Applicants herewith submit two (2) annotated sheets showing the above-described changes indicated in red in **Appendix B**.

Attachments: Replacement Sheets (8)  
Annotated Sheets (2)

## **REMARKS**

Claims 1-26 are pending. Claims 22-26 have been withdrawn. Claim 21 has been allowed.

### **Specification**

Applicants have amended the specification to correct obvious errors therein.

### **Drawings**

Applicants submit eight (8) replacement sheets of formal drawings in **Appendix A**.

Responsive to the Examiner's objections regarding the drawings, Applicants have added reference numeral 140 to Figures 6 and 8, and have amended Figure 8 to show the drive component (164) extending through the endframe opening (114) (Figure 6), magnet opening (138) (Figure 6), and cover opening (160). Applicants also submit two (2) annotated sheets showing the above-described changes in red in **Appendix B**.

Applicants respectfully submit that the resilient fingers and the walls extending from the cover are shown in Figures 6-8 as elements 120a-c and 124a-c, respectively.

No new matter has been added.

### **Claim Objections**

Applicants have amended Claim 20 to provide antecedent basis for "said fingers".

### **Claim Rejections - 35 U.S.C. § 102**

The Examiner rejected Claims 1, 5, 8-12, and 15-18 under 35 U.S.C. § 102(b) as being anticipated by Japanese Patent No. JP 07274443A (hereinafter "Kidokoro '443"). The Examiner also rejected Claims 1-3, 8-10, 12, 15, 16, and 18 under 35 U.S.C. § 102(b) as being anticipated by Japanese patent No. JP 06105521A (hereinafter "Sugiyama et al. '521").

Kidokoro '443 discloses a mounting device for a speed-detecting element, shown in Fig. 1. Rearside case 21a includes stator 24, rotor 26, and recessed part 23. Recessed part 23 houses projecting rotating disk 29 which is fixed to rotor axle 27 of rotor 26. Cover body 30 is fitted to recessed part 23 and seals the space including rotating disk 29 and speed detecting element 37 (See, English language abstract, "The rotating disk 29 and the speed detecting element 37 are provided in a space between the recessed part 23 and the cover body 30 in a sealed state in the motor.").

Sugiyama et al. '521 discloses an inner rotor type brushless motor, shown in Fig. 1, incorporating a rotation position detecting section and an FG sensor section into one body. The motor includes rotating shaft 5, FG yoke 12 fitted into a recess of shaft 5 and secured thereto via screw 14, main magnet 6, and submagnet 13. As shown in Fig. 1, the motor also appears to include a cover disposed to the left of the motor housing. This cover provides a sealed housing for submagnet 13 and its associated structure.

Independent Claims 1 and 15 call for an electric motor including, *inter alia*, a motor housing having an armature, an endframe attached to the housing and including an opening aligned with the armature, and a cover having an opening aligned with the armature. Independent Claim 8 calls for an electric motor including, *inter alia*, a motor housing having an armature, an endframe attached to the motor housing and including an opening aligned with the armature, and retaining means extending from said endframe for attaching and positioning a cover to the endframe to align the cover with the endframe opening. Independent Claim 18 calls for an electric motor including, *inter alia*, a motor housing having an armature, an endframe attached to the motor housing and including an opening aligned with the armature, and alignment structure extending from said endframe and attaching a cover to the endframe and aligning the cover with the endframe opening.

Kidokoro '443 and Sugiyama et al. '521 each fail to disclose or suggest a cover including an opening aligned with the armature of the motor, as called for in amended Claims 1 and 15. In contrast, Kidokoro '443 teaches that cover body 30 *seals* the cavity including rotating disk 29 and speed detecting element 37. Including an opening in cover body 30 would render cover body 30 inoperable to effectively seal the cavity. Sugiyama et al. '521 teaches a similar arrangement for the motor disclosed therein, including cover sealing the cavity including submagnet 13.

Additionally, Kidokoro '443 and Sugiyama et al. '521 each fail to disclose or suggest retaining means or alignment structure extending from the endframe to attach and position the cover thereto to align the cover with the endframe opening, as called for in amended Claims 8 and 18, respectively. In contrast, Kidokoro '443 discloses case 21a including recessed part 23 for accepting cover body 30 therein. Sugiyama et al. '521 teaches a similar arrangement for the motor therein. Sugiyama et al. '521 discloses the cover attached to a flat, non-extending portion of the motor housing.

Because Kidokoro '443 and Sugiyama et al. '521 each fail to disclose all of the claim limitations of Independent Claims 1, 8, 15, and 18, Applicants respectfully request withdrawal of the 35 U.S.C. § 102(b) rejections of Claims 1, 8, 15, and 18 based on Kidokoro '443 and Sugiyama et al. '521, and Claims 2-3, 5, 9-12, and 16-17 depending therefrom.

**Claim Rejections - 35 U.S.C. § 103**

The Examiner rejected Claims 4 and 19 under 35 U.S.C. § 103(a) as being unpatentable over Kidokoro '443 in view of Japanese Patent No. JP406284641A (hereinafter "Ozuru '641"). Applicants respectfully submit that Claims 4 and 19 are patentable for at least the reasons set forth above for Claims 1 and 18, from which Claims 4 and 19 depend, respectively.

The Examiner rejected Claims 6, 7, 13, and 14 under 35 U.S.C. § 103(a) as being unpatentable over Kidokoro '443 and Sugiyama et al. '521 in view of Applicants' Admitted Prior Art (hereinafter "AAPA"). Applicants respectfully submit that there is no motivation for a person of ordinary skill in the art to combine either Kidokoro '443 or Sugiyama et al. '521 with AAPA.

AAPA discloses motor 10 including motor housing 12, end plate 26, and Hall effect assembly 30 having cover 42, shown in Fig. 1 of the present application. Cover 42 includes opening 62 through which a drive pin or the end of a flexible cable may be inserted. The disclosures of Kidokoro '443 and Sugiyama et al. '521 are discussed above. In particular, Applicants direct the Examiner's attention to the fact that the motors of Kidokoro '443 and Sugiyama et al. '521, which are similar in operation and structure, provide for a sealed motor housing by using a cover structure. "The rotating disk 29 and the speed detecting element 37 are provided in a space between the recessed part 23 and the cover body 30 in a *sealed state* in the motor." *See*, Kidokoro '443 Constitution (emphasis added). A person of ordinary skill in the art would not be motivated to include an opening in the covers of Kidokoro '443 and Sugiyama et al. '521 due to the fact that the covers provide a sealed environment for housing internal components of detection mechanisms therein. In fact, an opening in the covers of Kidokoro '443 and Sugiyama et al. '521 would effectively make the covers thereof inoperable for their apparent intended purpose, i.e., to provide a sealed housing for the internal components of the detection mechanisms. Applicants respectfully submit that if a proposed modification renders the prior art being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. *See, In re Gordon*, 733 F.2d 900, 221 U.S.P.Q. 1125 (Fed.

Cir. 1984). Because a person of ordinary skill in the art would not be motivated to combine Kidokoro '443 and/or Sugiyama et al. '521 with AAPA, Applicants respectfully request withdrawal of the 35 U.S.C. § 103(a) rejection of Claims 6, 7, 13, and 14.

The Examiner rejected Claim 20 under 35 U.S.C. § 103(a) as being unpatentable over Kidokoro '443 and Ozuru '641 in view of U.S. Patent No. 5,877,572 (hereinafter "Michaels et al. '572"). Applicants respectfully submit that Claim 20 is patentable for at least the reasons set forth above for Claim 18, from which Claim 20 depends.

**Allowable Subject Matter**

Applicants appreciate the Examiner's indication of allowable subject matter in Claim 21. Please note that Applicants have amended Claim 21 to correct a minor typographical error.

It is believed that the above represents a complete response to the Official Action and reconsideration is requested. Specifically, Applicants respectfully submit that the application is in condition for allowance and respectfully request allowance thereof.

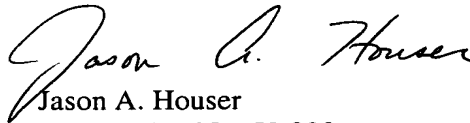
In the event Applicants have overlooked the need for an additional extension of time, payment of fee, or additional payment of fee, Applicants hereby petition therefor and authorize that any charges be made to Deposit Account No. 02-0385, Baker & Daniels.

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Should the Examiner have any further questions regarding any of the foregoing, he is respectfully invited to telephone the undersigned at (260) 424-8000.

Respectfully submitted,

  
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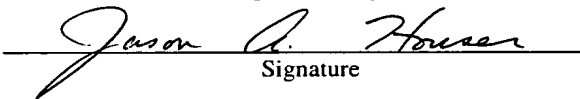
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Jason A. Houser, Reg. No. 53,038

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Name of Registered Representative

  
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January 5, 2006

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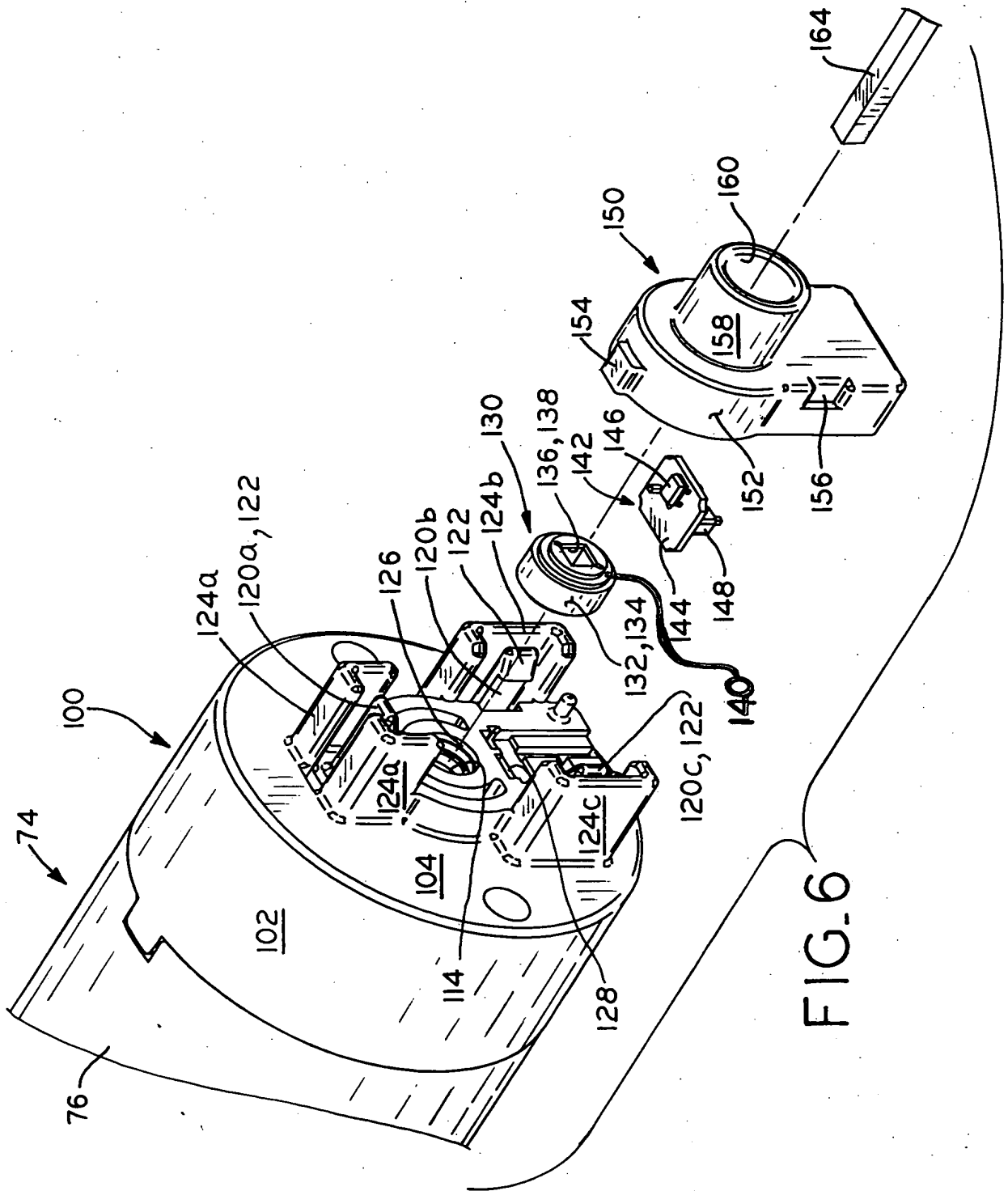
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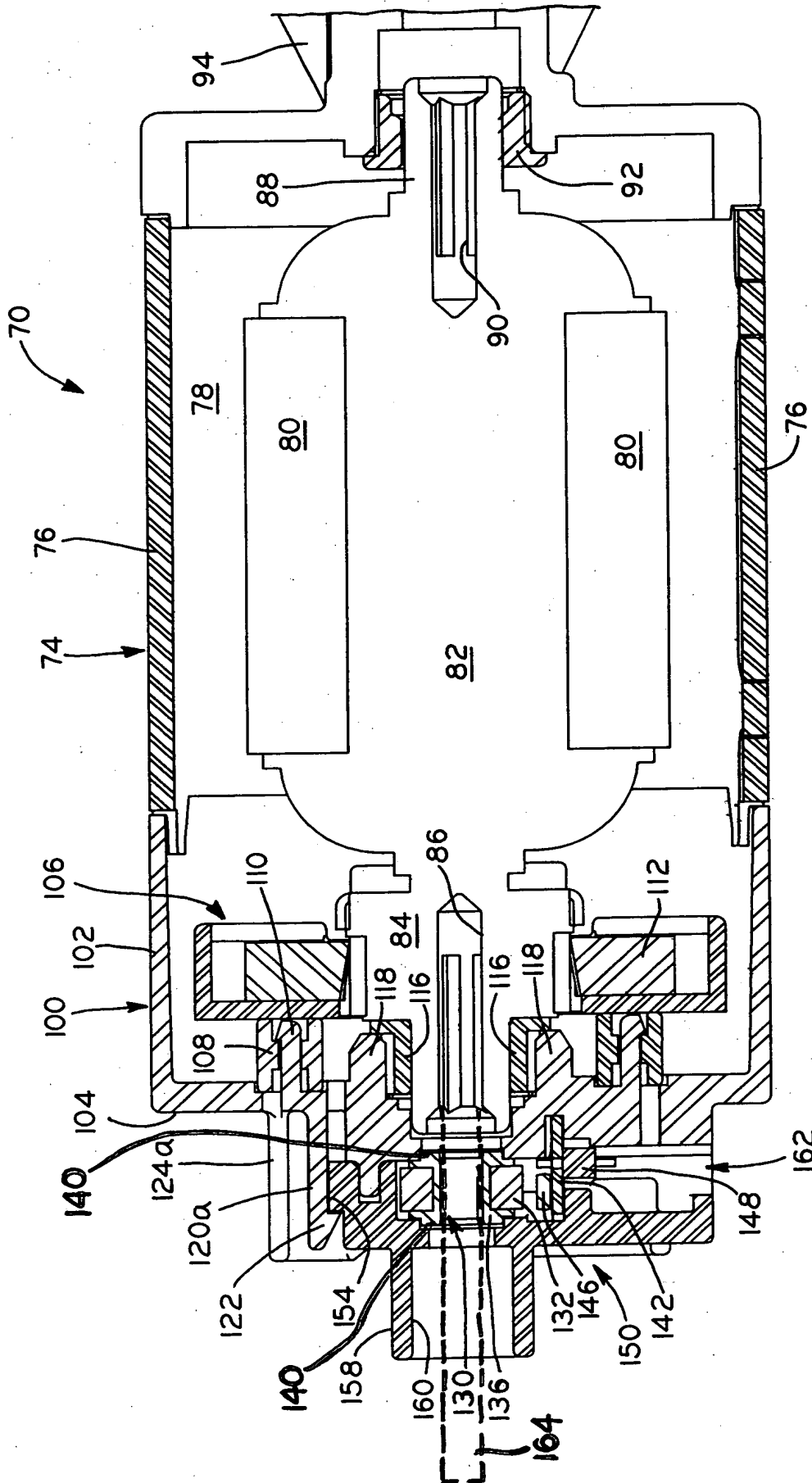
## **APPENDIX A**

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## **APPENDIX B**







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